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Amendment and Response to Office Action
Mailed 4 MAY 2005

REMARKS

In the Office Action, the Examiner objected to the specification and rejected claims 1-52. By this paper, the Applicant has amended the specification; amended claims 1, 8, 10, 20-24, 31, and 41; cancelled claims 5, 9, 16-18, 37, 39, 40, and 49 – 52; and added a new claims 53-55. Claims: 1-4, 6-8, 10-15, 19-36, 38, 41-48, and 53-55 are now pending. The amendments to the Specification do not add any new matter. In view of the forgoing amendments and the following remarks, the Applicant respectfully requests reconsideration and allowance of all pending claims.

Objection to the Specification

In the Office Action, the Examiner objected to the specification. Specifically, the Examiner stated that the “The current state of this application reflecting the status of present pendency, (ex. Abandonment or patent maturity), including associated patent numbers, should be amended into the specification.” Office Action, page 2, lines 8-10. As requested by the Examiner, the Applicant has amended the specification to identify the serial number of the related applications, which are still in pending in the United States Patent Office. In view of this amendment, the Applicant respectfully requests that the Examiner withdraw the objection to the specification.

Claim Rejections under 35 U.S.C. § 112

In the Office Action, the Examiner rejected claims 1 and 20 under U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Applicant amends the claims to more clearly recite the method described in the specification which the Applicant believes to be a patentable invention.

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In the Office Action, regarding claims 1 and 20, the Examiner objected to the use of the term "substantially simultaneously across the communication [[bus]] [means]" as unclear and vague. The Examiner further stated that "It is not clearly understood than [sic] meaning of "across the communications bus" as used within the claim." The Applicant has amended the referenced claims to remove the terms.

Claim Rejections under 35 U.S.C. § 103

In the Office Action, the Examiner rejected claims 1,5-6, 8-9, 13-14, 16-17,20,22-23,28-29, 31-32,41-42,46-47,49-51 as being unpatentable over Cromer et al. (US Patent 6,282,643 B1) and Brodie et al. (Brodie) (US 2001/0042020 A1). The Applicant respectfully traverses these rejections.

Claims 1 and 20

The Applicant respectfully asserts that the Cromer reference cited refers to the IO device handlers being compressed and specifically states that "all of the modules that are not needed during the initial setup of the system are stored in the BIOS flash memory in a compressed form to conserve memory space." (Cromer, Col 7, L. 16-19) The specific inclusion "of the modules which are not needed during the initial setup of the system [emphasis added]", would imply that the modules which are needed during the initial setup of the system are to be stored in an uncompressed form. The state of the modules in the flash memory, either in compressed state or uncompressed state is not mentioned in any of the other citings from the Cromer document. Further, this reference only states the form modules should take when stored on the flash memory within the system and how they should be uncompressed when used. It does not make reference to their state during transfer to this secondary system to be stored in its flash memory

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from another system. The Applicant would like to respectfully point out that the primary task described in Claim 1 is the transfer of the modules to the target system in an expedient manner. The Applicant would further state that Cromer does not mention the act of compressing, and specifically states that some portions of the ROM are to remain uncompressed.

Claim 5

Regarding claim 5, the Applicant direct the Examiner to the remarks above concerning claims 1 and 20

Claim 6

Regarding claim 6, the Examiner by referencing Cromer (Col. 8, L.62 – Col.9, L.37) stated “Cromer also teaches refraining from flashing a remaining EEPROM in any of the plurality of EEPROMS fails to properly flash.” The Applicant does not believe the cited reference addresses the actions to take in an unsuccessful flashing of an EEPROM.

Claim 8

Regarding claim 8, The Applicant would again point out that the cited Cromer and Brodie documents do not mention methods of compression, points in the transfer where compression and de-compression may take place or be useful.

Claims 13, 20 and 23

Regarding claim 13, The Examiner states on page 8 of the Office Action, “wherein the microprocessor is adapted to receive the new EEPROM image transfer across the communication bus and store the new EEPROM image in the RAM (Col. 2, L. 46-67; and Col.5, L58 – Col. 6, L.6); and wherein the microprocessor is further adapted to flash the new EEPROM image to the

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EEPROM after the entire new EEPROM image is stored in the RAM.(Col. 5, L. 58 – Col. 6, L. 6; and L. 55-67).” The Applicant points out that closer examination of the references cited above will show that Cromer actually teaches “the BIOS is further operative on completion of the POST for transferring a portion of BIOS from the module to the RAM and for transferring control of the of the [*sic*] computer system to the BIOS portion.” (Cromer, Col. 2. L. 57 – 60). Cromer continues to describe the circuit configuration which is not used to “store the new EEPROM image in the RAM” (Office Action P. 8, L. 2) as the examiner suggest, but is in fact used “for allowing the BIOS in the flash memory modules to be accessed” (Col. 2. L. 65 – 66). This citation coupled with an examination of FIG. 7 of the Cromer patent, which shows Address Lines A0-A16 and Data Lines D0-D7 connecting directly between the LAN Controller 94 and the Flash Memory 66 show that the data image is not being buffered in main memory which FIG. 3 of the Cromer patent demonstrates is located on the other side of the PCI-ISA Bridge 52.

Claim 22

The Examiner cites Cromer (Col. 7, L. 10-22) and states “Cromer teaches compressing the single image to create a compressed single image.” The Applicant would like to respond by calling the Examiner’s attention to the very first sentence in this citation: “ROM BIOS includes a power on self test (POST) module 84, BIOS uncompressed module 86, and the compressed IO devices handlers 88.” Cromer (Col. 7, L. 10-12). The Applicant respectfully disagrees with the Examiner that Cromer teaches “creat[ing] a compressed single image” as evident by the three reference numbers in the citation showing that the BIOS image is indeed in multiple parts, with only one of those three parts being compressed.

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Claim 31

The Applicant agrees with the Examiner that Cromer's teachings of accessing a BIOS from a network device and Brodie's teachings of broadcasting to multiple computers simultaneously can be taken together, but would like to further point out to the Examiner that neither of these methods includes the improvements of the Applicant as stated in Claim 31, as amended.

Claim 41

The Examiner stated that "Claim 41 [...] [is] corresponding claim 8 [...], Therefore, [it is] rejected under the same rationale." The Applicant, upon review of the cited Cromer and Brodie documents does not find mention of methods of compression, or points in the transfer where compression and de-compression may take place or be useful.

Claims 14, 28-29, 42, and 46-47

Dependent Claims 14, 28-29, 42, and 46-67, depend directly or ultimately on an allowable base Claim and are therefore allowable for this reason and by virtue of their further distinctive recitation.

Claims 2-4, 7, 10-12, 15, 18-19, 21, 24-27, 30, 33-36, 38, 43-45, 48

The Examiner states; "Claims 2-4, 7, 10-12, 15, 18-19, 21, 24-27, 30, 33-36, 38, 43-45, 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cromer in view of Brodie as applied to claims 1, 8, 20, 31, and 41 above, and further in view of Herbert, Jr. (Herbert) (US 5,741,749 B2)." The Applicant has amended the independent claims on which these are based as

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well as submitted remarks for corresponding claims above and request the Examiner now allow these claims.

Claim 2

Regarding Claim 2, In the Office Action on page 15 the Examiner states that Herbert teaches "creating an initial frequency table of an initial image placed on the EEPROM, and using the initial frequency table to create the compressed image." The Applicant submits that Herbert's teachings in this regard is "to represent a **relatively large sample of handwritten information** in order to separately determine the frequency of occurrence of each different [...] value, thereby enabling the lookup tables to be constructed in advance.[emphasis added]" The strength of Huffman Encoding is in the closely inverse relationship between the frequency of the characters in the actual data being represented and the number of bits used to encode those characters. Hebert teaches using a frequency table, which **does not relate** to the data being transferred, by using a "relatively large sample", thereby, "enabling the [frequency tables] to be constructed in advance." Conversely, the improved method claimed in this application, **"creating an initial frequency table of an initial image placed on the plurality of EEPROMs; and creating the compressed image using the initial frequency table."**

Claims 3 10 - 12, and 33 - 35

Regarding Claims 3, 10 - 12, and 33 - 35, Hebert teaches a method "enabling the look-up tables to be constructed in advance." (Hebert, Col. 12, L. 3 - 4), and further teaches constructing these tables from a "relatively large sample" (Hebert, Col. 11, L. 67). As one skilled in the Art will be able to see, this method is inferior to that proposed by the applicant. Hebert seems aware of the limitations of this method because he further teaches another method of "allowing look-up

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tables to be constructed 'on the fly' that are tailored to the actual handwriting input." (Hebert, Col. 12, L. 8 - 10). As already pointed out by the Applicant, this method is also inferior because the "tailored" frequency tables must now be stored / transferred with the data to enable de-compression as they can not be re-constructed without the original data.

Claim 4

Regarding Claim 4, the Examiner states "Herbert, in the same field of endeavor having closely related objectivity, teaches Huffman encoding." The Applicant submits that one skilled in the arts is aware that pure Huffman encoding involves building the frequency table from the file to be compressed. The Applicant, for further support of this stance, cites Whiting (US 5,126,739) which describes the method known as Huffman Encoding as presented by David A. Huffman, in his paper "A Method for the Construction of Minimum-Redundancy Codes.", Proceedings of the IRE, pp. 1098-1110, September 1952. Patent 5,126,739, Column 2, Line 44 - 46, states "Huffman derived an algorithm for optimally assigning the bit strings based on **the relative frequency statistics for the file.** [emphasis added]" From this the Applicant submits that the Application's method of using the frequency table of a closely related file, like the one being replaced, is not anticipated or obvious based on these teachings.

Claims 7 and 21

Regarding Claim 7 and 21, the Examiner states "Herbert, in the same field of endeavor having closely related objectivity, teaches a low bandwidth communication bus. (Col. 2, L. 45 - 55; and Col. 13 L. 35 - 40)." The Applicant submits that Herbert states in both references "[requires ...] **less bandwidth to transmit** [emphasis added]". The Applicant further submits that this is not a reference to a low bandwidth communications bus.

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Claims 15, 19, 24, 25 - 27, 30, 36, 38, 43 - 45, 48

Dependent Claims 15, 19, 24, 25 - 27, 30, 36, 38, 43 - 45, 48, depend directly or ultimately on an allowable base Claim and are therefore allowable for this reason and by virtue of their further distinctive recitation.

Claims 37, 39, and 52

Regarding the claims 37, 39, and 52, in view of the prior art cited by the Examiner in Garcia (US 6,727,601 B2), the Applicant has cancelled claims 37, 39 and 52.

Claims 53-55

New Claims 53-55 are method claims which are now presented in order to more fully protect the inventor's contribution to the art. They are allowable over the cited references for at least the reasons discussed herein.

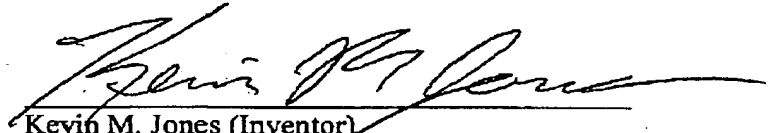
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Conclusion

The Applicant respectfully submits that all pending claims are in condition for allowance. However, if the Examiner wishes to resolve any other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned at the telephone number indicated below.

Respectfully submitted,

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